# EXHIBIT A

## persico corrected Jan08.ST25.txt SEQUENCE LISTING

|                                     | SEQUENCE EXST                                             | 1110     |          |      |    |
|-------------------------------------|-----------------------------------------------------------|----------|----------|------|----|
| <110>                               | Minchiotti, Gabriella<br>Persico, Maria<br>Parisi, Silvia |          |          |      |    |
| <120>                               | METHOD FOR PROMOTING DIFFERENTIA                          | ATION OF | STAMINAL | CELL |    |
| <130>                               | AE 89363                                                  |          |          |      |    |
| <140><br><141>                      | us 10/550,498<br>2005-09-20                               |          |          |      |    |
| <160>                               | 42                                                        |          |          |      |    |
| <170>                               | PatentIn version 3.3                                      |          |          |      |    |
| <210><br><211><br><212><br><213>    | 1<br>22<br>DNA<br>Artificial                              |          |          |      |    |
| <220><br><223>                      | primer nodal F                                            |          |          |      |    |
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|                                     | 2<br>gttg gtatcgtttc a                                    |          |          |      | 21 |
| <210><br><211><br><212><br><213>    | 3<br>25<br>DNA<br>Artificial                              |          |          |      |    |
| <220><br><223>                      | primer alk-4 F                                            |          |          |      |    |
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Asn Ser Ile Trp Asp Gln Lys Glu Pro Ala Val Arg Asp Arg Ser Phe 35 40

Gln Phe Val Pro Ser Val Gly Ile Gln Asn Ser Lys Ser Leu Asn Lys 50 55

Thr Cys Cys Leu Asn Gly Gly Thr Cys Ile Leu Gly Ser Phe Cys Ala 65 70 75 80

Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys 85 90 95

Glu His Cys Gly Ser Ile Leu His Gly Thr Trp Leu Pro Lys Lys Cys 100 105 110

Ser Leu Cys Arg Cys Trp His Gly Gln Leu His Cys Leu Pro Gln Thr 115 120 125

Phe Leu Pro Gly Cys Asp Gly His Val Met Asp Gln Asp Leu Lys Ala 130 135 140

Ser Arg Thr Pro Cys Gln Thr Pro Ser Val Thr Thr Phe Met Leu 145 150 155

Ala Gly Ala Cys Leu Phe Leu Asp Met Lys Val 165 170

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persico corrected Jan08.ST25.txt
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Asn Ser Ile Trp Asp Gln Lys Glu Pro Ala Val Arg Asp Arg Ser Phe 35 40 45
Gln Phe Val Pro Ser Val Gly Ile Gln Asn Ser Lys Ser Leu Asn Lys 50 60
Thr Cys Cys Leu Asn Gly Gly Thr Cys Ile Leu Gly Ser Phe Cys Ala 75 80
Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys
85 90 95
Glu His Cys Gly Ser Ile Leu His Gly Thr Trp Leu Pro Lys Lys Cys 100 	 105 	 110
Ser Leu Cys Arg Cys Trp His Gly Gln Leu His Cys Leu Pro Gln Thr
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Phe Leu Pro Gly Cys Asp Gly His Val Met Asp Gln Asp Leu Lys Ala
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Ser Arg Thr Pro Cys Gln Thr Pro Ser Val Thr Thr
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persico corrected Jan08.ST25.txt

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Asn Ser Ile Trp Asp Gln Lys Glu Pro Ala Val Arg Asp Arg Ser Phe 35 40
Gln Phe Val Pro Ser Val Gly Ile Gln Asn Ser Lys Ser Leu Asn Lys
50 60
Thr Cys Cys Leu Asn Gly Gly Thr Cys Ile Leu Gly Ser Phe Cys Ala
65 70 75 80
Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys
85 90 95
Glu His Cys Gly Ser Ile Leu His Gly Thr Trp Leu Pro Lys Lys Cys 100 105 110
Ser Leu Cys Arg Cys Trp His Gly Gln Leu His Cys Leu Pro Gln Thr
115 120 125
Phe Leu Pro Gly Cys Asp Gly His Val Met Asp Gln Asp Leu Lys Ala
130 135 140
Ser Arg Thr Pro Cys Gln Thr Pro Ser Val Thr Thr Asn Ser Gly
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Lys Ser Leu Asn Lys Thr Cys Cys Leu Asn Gly Gly Thr Cys Ile Leu 35 40 45 Pagina 11

Gly Ser Phe Cys Ala Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu 50 60 His Asp Val Arg Lys Glu His Cys Gly Ser Ile Leu His Gly Thr Trp 65 70 75 80 Leu Pro Lys Lys Cys Ser Leu Cys Arg Cys Trp His Gly Gln Leu His 85 90 95 Cys Leu Pro Gln Thr Phe Leu Pro Gly Cys Asp Gly His Val Met Asp 100 105 110 Gln Asp Leu Lys Ala Ser Arg Thr Pro Cys Gln Thr Pro Ser Val Thr 115 120 125

Thr

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Lys Ser Leu Asn Lys Thr Cys Cys Leu Asn Gly Gly Thr Cys Ile Leu 35 40 45

Gly Ser Phe Cys Ala Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu 50 60

His Asp Val Arg Lys Glu His Cys Gly Ser Ile Leu His Gly Thr Trp 65 70 75 80

Leu Pro Lys Lys Cys Ser Leu Cys Arg Cys Trp His Gly Gln Leu His

Cys Leu Pro Gln Thr Phe Leu Pro Gly Cys Asp Gly His Val Met Asp 100 105 110

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persico corrected Jan08.ST25.txt
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115 120 125
Thr Thr Asn Ser Gly His His His His His 130
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20 25 30
Asn Ser Ile Trp Asp Gln Lys Glu Pro Ala Val Arg Asp Arg Ser Phe 35 40
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Gln Phe Val Pro Ser Val Gly Ile Gln Asn Ser Lys Ser Leu Asn Lys 50 60

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Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys 85 90 95

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His Gln Glu Phe Ala Arg Pro Ser Arg Gly Tyr Leu Ala Phe Arg Asp 35 40 45

Asp Ser Ile Trp Pro Gln Glu Glu Pro Ala Ile Arg Pro Arg Ser Ser 50 60

Gln Arg Val Pro Pro Met Gly Ile Gln His Ser Lys Glu Leu Asn Arg 65 70 75 80

Thr Cys Cys Leu Asn Gly Gly Thr Cys Met Leu Gly Ser Phe Cys Ala 85 90 95

Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys

Glu Asn Cys Gly Ser Val Pro His Asp Thr Trp Leu Pro Lys Lys Cys 115 120 125

Ser Leu Cys Lys Cys Trp His Gly Gln Leu Arg Cys Phe Pro Gln Ala 130 135 140

Phe Leu Pro Gly Cys Asp Gly Leu Val Met Asp Glu His Leu Val Ala 145 150 155 160

Ser Arg Thr Pro Glu Leu Pro Pro Ser Ala Arg Thr Thr Phe Met Pagina 14

Leu Val Gly Ala Cys Leu Phe Leu Asp Met Lys Val 180 185

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Artificial

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synthetic h cripto secreted

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His Gln Glu Phe Ala Arg Pro Ser Arg Gly Tyr Leu Ala Phe Arg Asp 35 40 45

Asp Ser Ile Trp Pro Gln Glu Glu Pro Ala Ile Arg Pro Arg Ser Ser 50 60

Gln Arg Val Pro Pro Met Gly Ile Gln His Ser Lys Glu Leu Asn Arg 65 70 75 80

Thr Cys Cys Leu Asn Gly Gly Thr Cys Met Leu Gly Ser Phe Cys Ala. 85 90

Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys 100 105 110

Glu Asn Cys Gly Ser Val Pro His Asp Thr Trp Leu Pro Lys Lys Cys 115 120 125

Ser Leu Cys Lys Cys Trp His Gly Gln Leu Arg Cys Phe Pro Gln Ala 130 135 140

Phe Leu Pro Gly Cys Asp Gly Leu Val Met Asp Glu His Leu Val Ala 145 150 160

Ser Arg Thr Pro Glu Leu Pro Pro Ser Ala Arg Thr Thr 165 170

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His Gln Glu Phe Ala Arg Pro Ser Arg Gly Tyr Leu Ala Phe Arg Asp 35 40

Asp Ser Ile Trp Pro Gln Glu Glu Pro Ala Ile Arg Pro Arg Ser Ser 50 60

Gln Arg Val Pro Pro Met Gly Ile Gln His Ser Lys Glu Leu Asn Arg 65 70 75 80

Thr Cys Cys Leu Asn Gly Gly Thr Cys Met Leu Gly Ser Phe Cys Ala 85 90 95

Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys  $100 ext{ } 105$ 

Glu Asn Cys Gly Ser Val Pro His Asp Thr Trp Leu Pro Lys Lys Cys 115 120 125

Ser Leu Cys Lys Cys Trp His Gly Gln Leu Arg Cys Phe Pro Gln Ala 130 135 140

Phe Leu Pro Gly Cys Asp Gly Leu Val Met Asp Glu His Leu Val Ala 145 150 155 160

Ser Arg Thr Pro Glu Leu Pro Pro Ser Ala Arg Thr Thr Asn Ser 165 170 175

Gly His His His His His